

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/B2004/004288

International filing date (day/month/year)
23.12.2004

Priority date (day/month/year)
29.12.2003

International Patent Classification (IPC) or both national classification and IPC
D06P5/08, D06P5/06, C08G73/02, C08G65/24, C08G65/333

Applicant
CLARIANT INTERNATIONAL LTD

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/004288

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/004288

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-17
	No: Claims	
Inventive step (IS)	Yes: Claims	1-17
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-17
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

AP2004/004288
29 JUN 2006

Re Item V

Reasoned statement under rule 66.2(a)(ii) PCT with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The following documents are mentioned for the first time in this written opinion; the numbering will be adhered to in the rest of the procedure.

D1 : US 3 639 296 A (FROTSCHER HERBERT ET AL) 1 February 1972 (1972-02-01)

D2 : GB 1 431 476 A (BASF AG) 7 April 1976 (1976-04-07)

D3 : US 5 371 119 A (BOHLANDER RALF ET AL) 6 December 1994 (1994-12-06)

D4 : US 4 737 576 A (BACHEM HENNING ET AL) 12 April 1988 (1988-04-12)

Novelty:

Document D1 discloses same kind of polymeric etheramines applied on textile materials to impart them durable antistatic properties.

The subject-matter of independent claim 1 differs from this known D1 in that the finishes are not applied on dyed textile materials, excepted in example IV, where textile have been dyed with disperse dyes which are not water soluble dyes.

The subject-matter of independent claim 1 is therefore new (Article 33(2) PCT).

The same reasoning applies, mutatis mutandis, to the subject-matter of independent claim 8, which therefore is also considered to meet the requirements of the PCT with respect to novelty and inventive step.

The subject-matter of independent claim 16 differs from this known D1 in that there is no other cationic dye fixative agent present in the composition.

Therefore, the subject-matter of independent claim 16 is new (Article 33(2) PCT).

The same reasoning applies, mutatis mutandis, to the subject-matter of independent claim 17, which therefore is also considered to meet the requirements of the PCT with respect to novelty and inventive step.

The same reasoning applies similarly to D2 and D3. The polymeric etheramines are not applied as aftertreatment to textile materials dyed with water soluble-dyes.

Inventive Step:

D4 discloses etheramines for treating textile materials dyed with water-soluble dyes to improve their wet fastness like perspiration and wash fastness.

The subject-matter of independent claims 1, 8, 16 and 17 differs in the way of preparing the polymeric etheramines.

The problem to be solved by the present invention may be regarded as providing an aftertreatment for textile materials dyed with water-soluble dyes which improves chlorine fastness.

The solution to this problem is to use polymeric etheramines obtained by condensing an oligohydroxy compound with epichlorohydrin and then with an amino compound.

There are no hints in the prior art which would have lead the skilled person to use these kind of etheramines as aftertreatment of textile materials dyed with water-soluble dyes to improve their chlorine fastness, therefore the proposed solution is not obvious and the subject-matter of independent claims 1, 8, 16 and 17 involves an inventive step.

Claims 2-7 and 9-15 are dependent claims and as such also meets the requirements of the PCT with respect to novelty and inventive step.

Industrial Applicability:

The subject-matter of claims 1-17 is considered to meet the requirements of Article 33(4)PCT.

Re Item VII

Certain defects in the international application

1) The document D1 has not been identified in the description and the relevant background art disclosed therein has not been briefly summarised in an objective way. Hence, the requirements of Rule 5.1(a)(ii)PCT are not fulfilled.

2) The independent claims have not been cast in a two part form, with those features which in combination are part of the prior art (see document D1) being placed in the preamble. Hence, the requirements of Rule 6.3(b)PCT are not met.

Re Item VIII

Certain observations on the international application

The present application does not meet the requirements of Article 6 PCT, in that the matter for which protection is sought is not correctly defined: it is not clear to which category belong claims 10-15, either to the category of "process" claims, or to the category of "use" claims.